

In the Claims

1.-64. (Cancelled)

65. (Currently Amended) A process for treating fibroses comprising administering a therapeutically effective amount of the pharmaceutical composition which comprises at least one biocompatible polymer of the following general formula (I):



wherein:

- A is $-(O-CH_2-CH_2-CO)-$,
- X is $-COOH$ or $-COO\text{Na}^+ \text{---} COO\text{Na}^+$,
- Y is $-CO-CH_2-CHOH-CH_2-SO_3H$ or $-CO-CH_2-CHOH-CH_2-SO_3\text{Na}^+ \text{---} CO-CH_2-CHOH-CH_2-SO_3\text{Na}^+$, and
- Z represents at least one functional chemical group, which is different from X and Y, selected from the group consisting of a fatty acid, amino acid, fatty alcohol, ceramide or derivative thereof and nucleotide addressing sequences and which confers supplementary biological or physiochemical properties, or wherein
 - A is a glucose monomer,
 - X is $-CH_2-COOH$ or $-CH_2-COO\text{Na}^+ \text{---} CH_2-COO\text{Na}^+$,
 - Y is $[[=SO_3H]] \text{---} SO_3H$ or $-SO_3\text{Na}^+$, and
 - a represents the number of monomers A such that the mass of said polymers of formula (I) is greater than approximately 5,000 da,
 - x represents a substitution rate of the monomers A by the groups X, which is between approximately 20 and 150%,
 - y represents a substitution rate of the monomers A by the groups Y, which is between approximately 30 and 150%, and
 - z represents a substitution rate of the monomers A by the groups Z, which is between approximately 0 and 50%.

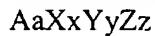
66. (Previously Presented) A process for treating fibroses comprising administering a therapeutically effective amount of the pharmaceutical composition which comprises at least one biocompatible polymer of the following general formula (I):



wherein:

- A represents a monomer selected from the group consisting of a sugar or -(O-CH₂-CH₂-CO)-,
- X represents a carboxyl group bonded to monomer A and is contained within a group according to the following formula: -R-COO-R', in which R is a bond or an aliphatic hydrocarbon chain, optionally branched and/or unsaturated, and which can contain one or more aromatic rings except for benzylamine and benzylamine sulfonate, and R' represents a hydrogen atom or a cation,
- Y represents a sulfate or sulfonate group bonded to monomer A and is contained within a group according to one of the following formulas: -R-O-SO₃-R', -R-N-SO₃-R', -R-SO₃-R', in which R is a bond or an aliphatic hydrocarbon chain, optionally branched and/or unsaturated, and which can contain one or more aromatic rings except for benzylamine and benzylamine sulfonate, and R' represents a hydrogen atom or a cation,
- Z represents at least one functional chemical group, which is different from X and Y, selected from the group consisting of a fatty acid, amino acid, fatty alcohol, ceramide or derivative thereof and nucleotide addressing sequences and which confers supplementary biological or physiochemical properties,
- a represents the number of monomers A such that the mass of said polymers of formula (I) is greater than approximately 5,000 da,
- x represents a substitution rate of the monomers A by the groups X, which is between approximately 20 and 150%,
- y represents a substitution rate of the monomers A by the groups Y, which is between approximately 30 and 150%, and
- z represents a substitution rate of the monomers A by the groups Z, which is between approximately 0 and 50%.

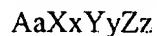
67. (New) A process for treating fibroses comprising administering a therapeutically effective amount of the pharmaceutical composition which comprises at least one biocompatible polymer of the following general formula (I):



wherein:

- A is glucose,
- X is $-\text{CH}_2\text{-COOH}$ or $-\text{CH}_2\text{-COO}^-\text{Na}^+$,
- Y is $-\text{SO}_3^-$ or $-\text{SO}_3\text{H}$, and
- Z is phenylalanine or tyrosine,
- a represents the number of monomers A such that the mass of said polymers of formula (I) is greater than approximately 5,000 da,
- x represents a substitution rate of the monomers A by the groups X, which is between approximately 19.8 and 50%,
- y represents a substitution rate of the monomers A by the groups Y, which is between approximately 50 and 110%, and
- z represents a substitution rate of the monomers A by the groups Z, which is between approximately 17.9 and 30%.

68. (New) A process for treating fibroses comprising administering a therapeutically effective amount of the pharmaceutical composition which comprises at least one biocompatible polymer of the following general formula (I):



wherein:

- A is glucose,
- X is $-\text{CH}_2\text{-COOH}$ or $-\text{CH}_2\text{-COO}^-\text{Na}^+$,
- Y is $-\text{SO}_3^-$ or $-\text{SO}_3\text{H}$, and
- Z is acetate,
- a represents the number of monomers A such that the mass of said polymers of formula (I) is greater than approximately 5,000 da,
- x represents a substitution rate of the monomers A by the groups X, which is between approximately 19.8 and 50%,
- y represents a substitution rate of the monomers A by the groups Y, which is between approximately 50 and 110%, and
- z represents a substitution rate of the monomers A by the groups Z, which is between approximately 10 and 30%.